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Joseph G. Buchl

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EXAMINER

IWARE, OLUSEYE

ART UNIT

PAPER NUMBER

4127

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/054,719

**Applicant(s)**

BUEHL ET AL.

**Examiner**

Oluseye Iwarere

**Art Unit**

4127

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01/19/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_



### **DETAILED ACTION**

1. This communication is a first Office Action Non-Final rejection on the merits. Claims 1 – 18 have been restricted and the attorney has elected group 1, which consists of claims 1 – 7 and 12 – 18 as originally filed. These claims are currently pending and have been considered below.

Claims 8 – 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected restriction, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 01/18/2002.

### ***Claim Objections***

2. Claim 2 is objected to because of the following informalities: In line 1, “the a billing system” is unclear and appears to be a typographical error. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1 – 5, 7 and 12 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh (2001/0,037,269) in view of Boardman et al. (6,456,986).**

**As per claim 1**, Marsh discloses a digital delivery system facilitating the provisioning and billing of a service offered to subscribers, comprising:

at least one service, wherein the at least one service generates an offering marketed to a subscriber of the digital distribution system ([abstract]; via a transceiver is configured to receive billing information associated with a subscriber of a telecommunications service under a current rate plan.) ([abstract]; determines at least one proposed rate plan. The one proposed rate plan is construed as the offering);

a billing system in communication with said at least one service ([0057]; via a "computer-readable medium" can be any means that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device. The program and computer readable medium is construed as the billing system).

However, Marsh fails to explicitly disclose wherein the offering comprises metadata and a price algorithm and wherein the billing system is capable of interpreting the metadata to generate a bill corresponding to the offering.

Boardman et al. teaches a decision network based event pricing system in a component based, object oriented convergent customer care and billing system, with the feature of the offering comprising metadata (col. 3, lines 42 – 47; via a conventional configuration language can be used, however, it is preferred that the Meta Language as discussed in the related application noted previously be used. The use of a meta-language allows efficient configuration or reconfiguration of the rules for selecting and executing Price Plans)

and a price algorithm (col. 2, lines 42 - 43; via two types of decision networks are used, a Plan Selection Rule Set 10 and an Algorithm Selection Rule Set 30. The plan selection rules are being construed as the price algorithm because it states a Price Plan may consist of several Algorithms, each one used to rate different types of Events.) (col. 2, lines 46 - 48; via the Plan Selection Rule set essentially guides the Event to Price Plans. The Algorithm Selection Rule Set is within the Price Plan and guides the Event to Algorithms);

and wherein the billing system is capable of interpreting the metadata to generate a bill corresponding to the offering (col. 7, lines 23 – 33; via customers are billed for transactions that can be represented as Events. The events are construed as metadata, because they include metadata (col. 2, lines 45 – 54; The use of a meta-language allows efficient configuration or reconfiguration of the rules for selecting and

executing Price Plans. Each Condition contains source code for a small program able to determine if the Event being processed qualifies for that Condition or not. An example of a CML Condition program is "Event.network==FIXED" which performs a comparison operation to determine if the network associated with the Event is fixed).

From this teaching of Boardman et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for analyzing wireless communication records and for determining optimal wireless communication service plans disclosed by Marsh to include the metadata and pricing algorithm and interpretation of the metadata of Boardman et al. in order provide efficiency.

**As per claim 2**, Marsh discloses, wherein the billing system maintains at least one table comprising tax-related information associated with the offering ([Table 1]; via information table of state tax).

**As per claim 3**, Marsh discloses, wherein the data comprises a plurality of billing items, and wherein said billing system identifies at least one of said billing items for inclusion in the metadata ([abstract]; via the processor then analyzes the processed data in relation to a plurality of rate plans of a plurality of telecommunications service providers, and determines at least one proposed rate plan that would save the subscriber telecommunication costs relative to the current rate plan).

However Marsh does not explicitly disclose metadata.

Boardman teaches a decision network based event pricing system in a component based, object oriented convergent customer care and billing system with the feature of metadata (col. 3, lines 45 – 47; via it is preferred that the Meta Language as discussed in the related application noted previously be used).

From this teaching of Boardman et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for analyzing wireless communication records and for determining optimal wireless communication service plans disclosed by Marsh to include the metadata of Boardman et al. in order to provide efficiency.

**As per claim 4**, Marsh further discloses, a marketing component, wherein said marketing component provides marketing data associated with the offering to said price algorithm ([0074]; via getPackagesByZIP function 220 which determines which wireless service plan packages are offered within the user provided ZIP codes. The ZIP codes are construed as marketing data because marketing is defined as “the process of identifying and communicating with qualified prospects,” which is what this demographic data of a ZIP code is doing).

**As per claim 5**, the combination of Marsh and Boardman, as modified above for claim 1, fails to disclose wherein said price algorithm computes an offering price for the offering.



Boardman teaches, wherein said price algorithm computes an offering price for the offering ([abstract]); via a plan selection rule set is used to select a Price Plan for the Event and an Algorithm rule set is used to select an Algorithm to rate the Event).

Therefore it would have been obvious to modify Marsh and Boardman, as modified above for claim 1, with the computing of an offering as taught by Boardman in order to present a bill to the customer.

**As per claim 7**, the combination of Marsh and Boardman, as modified above for claim 6, fails to disclose, wherein said network controller is in indirect communication with said billing system.

Boardman teaches, wherein said network controller is in indirect communication with said billing system ([Boardman abstract]; a ratings engine system, which is construed as the network controller, uses decision networks to select and execute Price Plans to rate an Event) (col. 1, lines 22 – 24; via the present invention is directed to using a decision network to evaluate a Price Plan and an Event rating for rating customer transactions, and more particularly, to a system that rates and/or discounts Events based on business rules stored in a Price Plan database. The ratings engine system, which is construed as the network controller is using a decision network that evaluates a Price Plan. The use of a decision network is being construed as indirect communication with the billing system, because it uses rules stored in a Price Plan database, but does not directly do the communication itself).

Therefore it would have been obvious to modify Marsh and Boardman, as modified above for claim 6, with the network controller in indirect communication with said billing system as taught by Boardman in order to organize the charges to a customer.

**5. Claims 12 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman et al. (6,456,986) in view of Marsh (2001/0,037,269).**

**As per claim 12**, Boardman discloses a method of facilitating the provisioning and billing of a service in a digital delivery system, comprising:

querying a billing system to determine billing related metadata interpretable by said billing system, and (col. 3, lines 47 – 48; via each Condition contains source code for a small program able to determine, or query, if the Event being processed qualifies for that Condition or not) (col. 8, lines 21 – 23; via storage for storing price plans and decision networks of a telecommunications customer care and billing system which is construed as including the small program);

creating the offering, wherein said offering comprises metadata corresponding to said billing related metadata identified by said billing system (col. 3, lines 44 – 46; via use of a meta-language allows efficient configuration or reconfiguration of the rules for selecting and executing Price Plans. The price plans are construed as the offering.);  
and

forwarding said metadata to said billing system such that said billing system can generate a bill for said offering based upon said metadata (col. 5, lines 3 – 5; via a Rater and Summarizer 80 is responsible for all real-time rating and the accumulation of Event information for end of bill period rating and pricing. The Rater and Summarizer 80 is an Event driven system which is construed as having the act of forwarding).

However Boardman et al. fails to explicitly disclose, generating an offering representing an item for purchase from the service.

Marsh teaches a system and method for analyzing wireless communication records and for determining optimal wireless communication service plans with the feature of generating an offering representing an item for purchase from the service ([abstract]; via the processor then analyzes the processed data in relation to a plurality of rate plans of a plurality of telecommunications service providers, and determines at least one proposed rate plan that would save the subscriber telecommunication costs relative to the current rate plan. The determining of at least one proposed rate plan is construed as generating an offer of an item because the rate plan is being brought to the attention of the subscriber in the form of an offering).

From this teaching of Marsh, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the decision network based event pricing system in a component based, object oriented convergent customer care and billing system of Boardman to include the generating of an offering representing an item for purchase from the service taught by Marsh in order to enable the selection of a best service.

**As per claim 13**, Boardman further discloses, wherein creating an offering further comprises creating an offering comprising a price algorithm, wherein said price algorithm is utilized to compute a list price for said offering (col. 2, lines 42 - 43; via two types of decision networks are used, a Plan Selection Rule Set 10 and an Algorithm Selection Rule Set 30) (col. 2, lines 46 - 48; via the Plan Selection Rule set essentially guides the Event to Price Plans, which is construed as the "list price" for the offer. The Algorithm Selection Rule Set is within the Price Plan and guides the Event to Algorithms).

**As per claim 14**, Boardman further discloses comprising generating a bill at said billing system for said offering based upon said metadata (col. 4, lines 42 - 44; via a Price Plan may consist of several Algorithms, each one used to rate different types of Events. The act of rating different types of Events using the Price Plan is construed as generating a bill).

**As per claim 15**, the combination of Boardman and Marsh, as modified above for claim 14, discloses all the elements of the claimed invention, but fails to explicitly disclose, wherein generating a bill for said offering based upon said metadata comprises accessing at least one tax related table in said billing system to determine taxes associated with said offering.

Marsh teaches a system and method for analyzing wireless communication records and for determining optimal wireless communication service plans, wherein generating a bill for said offering based upon said metadata comprises accessing at least one tax related table in said billing system to determine taxes associated with said offering ([Table 1]; via information table of state tax).

From this teaching of Marsh, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the billing system of Boardman and Marsh as modified for claim 14, to include the tax related table taught by Marsh in order to calculate the bill.

**As per claim 16**, the combination of Boardman and Marsh, as modified above for claim 12, discloses all the elements of the claimed invention, but fails to explicitly disclose, comprising provisioning said offering to a subscriber of said digital delivery system, wherein said provisioning is implemented by said service.

Marsh further teaches a system and method for analyzing wireless communication records and for determining optimal wireless communication service plans, with the feature of comprising provisioning said offering to a subscriber of said digital delivery system, wherein said provisioning is implemented by said service ([abstract]; a processor analyzes processed data in relation to a plurality of rate plans of a plurality of telecommunications service providers, and determines at least one proposed rate) (A report of at least one proposed rate plan is then produced and provided to the subscriber, which enables selection of a best telecommunication service

provider. The telecommunication service provider is construed as implementing said service of said offering).

From this teaching of Marsh, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the billing system of Boardman and Marsh, as modified above for claim 12, to include the provisioning of said offering taught by Boardman in order to save the subscriber costs.

**As per claim 17**, the combination of Boardman and Marsh, as modified above for claim 16, discloses all the elements of the claimed invention, but fails to explicitly discloses, wherein said provisioning further comprises determining whether said subscriber is authorized to receive said offering, and wherein said determination is executed by said billing system.

Marsh teaches a system and method for analyzing wireless communication records and for determining optimal wireless communication service plans, wherein said provisioning further comprises determining whether said subscriber is authorized to receive said offering, and wherein said determination is executed by said billing system ([abstract]; Examiner construes the determining if the subscriber is authorized to get the offering when a report of at least one proposed rate plan is produced and provided to the subscriber).

From this teaching of Marsh, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the billing system of Boardman

and mars, as modified above for claim 16, to include the determining of authorization to receive said offering taught by Boardman in order to facilitate access of the service.

**As per claim 18**, the combination of Boardman and Marsh, as modified above for claim 16, discloses wherein provisioning said offering includes instructing a network controller to distribute content associated with said offering ([Boardman abstract]; a ratings engine system, which is construed as the network controller, uses decision networks to select and execute Price Plans to rate an Event) (col. 3, lines 64 – 67; the processes of the present invention can be stored and distributed on a storage medium, such as a disc, and can also be distributed over a network, such as the Internet).

6. **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh (2001/0,037,269) and Boardman et al. (6,456,986) in view of Alfvín et al. (7,231,367).**

**As per claim 6**, the combination of Marsh and Boardman, as modified above for claim 1, fails to further disclose, comprising a network controller in communication with said at least one service, for provisioning the offering to a set-top box

Alfvín et al. teaches an electronic imaging capture and billing distribution system with the feature a network controller in communication (col. 3, lines 28 – 31; The communication of the digital image data to a telecommunications service provider as shown in FIG. 1b by means of a wireless cellular telephone may be made automatic) with said at least one service (abstract; The method includes a telecommunication

service provider providing a telecommunication service to a customer), for provisioning the offering to a set-top box (col. 3, lines 55 – 60; There are also many alternative means which could be used to transfer image data to a telecommunications service provider including wired or wireless transmission to the internet, wired or wireless transmission to a cable television set-top box).

Therefore it would have been obvious to modify Marsh and Boardman, as modified above for claim 1, with the network controller in communication with at least one service as taught by Alfvín in order to distribute information related to the service.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barnard et al. (2002/0,103,731), which discloses a system and method for project preparing a procurement and accounts payable system, Logan et al. (6,493,680) which discloses a method and apparatus for processing billing transactions, Ensel (6,493,685), which discloses an electronic account presentation and response system and method, Sako et al. (7,062,467), which discloses an information distributing method and system and Kolling (6,385,595), which discloses an electronic statement presentment system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oluseye Iwarere whose telephone number is (571) 270-5112. The examiner can normally be reached on Monday to Thursday 7:30am to 5 (EDT).



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on (571) 272-3033. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elaine Gort/  
Primary Examiner, Art Unit 3627

OI